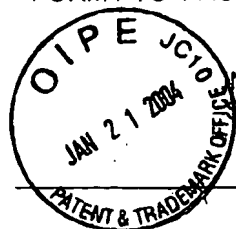


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## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
/AW/	4,816,397	03/28/89	Boss et al.	435	68	
	4,950,599	08/21/90	Bertling	435	172.3	
	4,959,313	09/25/90	Taketo	435	69.1	
	5,204,244	04/20/93	Fell et al.	435	69.6	
	5,545,806	08/13/96	Lonberg et al.	800	2	
	5,545,807	08/13/96	Surani et al	800	2	
	5,569,824	10/29/96	Donehower et al.	800	2	
	5,569,825	10/29/96	Lonberg et al.	800	2	
	5,591,669	01/07/97	Krimpenfort et al.	800	2	
	6,150,584	11/21/00	Kucherlapati, et al.	800	18	

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
/AW/	AU-B-15172/95	07/10/95	Australia				
	EP 0 298 807 A1	17/06/88	Europe				
	EP 0 315 062	05/10/89	Europe				
	EP 0 322 240	06/28/89	Europe				
	EP 0 459 372 A3	28/05/91	Europe				
	EP 0 463 151	01/02/92	Europe				
	WO 90/04036	04/19/90	PCT				
	WO 91/00906	01/ 24/91	PCT				
	WO 91/10741	07/25/91	PCT				
	WO 92/03918	03/19/92	PCT				
	WO 93/05165	03/18/93	PCT				
	WO 94/00569	01/06/94	PCT				
	WO 94/02602	02/03/94	PCT				
	WO 96/33735	10/31/96	PCT				

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## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER INITIAL	
/AW/	Albertsen et al., "Construction and Characterization of a Yeast Artificial Chromosome Library Containing Seven Haploid Human Genome Equivalents," <i>Proc. Natl. Acad. Sci.</i> 87:4256-4260 (1990).
	Aldhous, "Transgenic mice display a class (switching) act," <i>Science</i> 262:1212-1213 (1993).
	Ayares, et al., "Sequence Homology Requirements for Intermolecular Recombination in Mammalian Cells," <i>Proc. Natl. Acad. Sci. USA</i> 83:5199-5203 (1986).
	Berman, et al., "Content and Organization of the Human Ig V <sub>H</sub> Locus: Definition of Three New V <sub>H</sub> Families and Linkage to the Ig C <sub>H</sub> Locus," <i>EMBO J.</i> 7:727-738 (1988).
	Bird, et al., "Single-Chain Antigen-Binding Proteins," <i>Science</i> , 243:423-426 (1988).
	Blankenstein et al., "Immunoglobulin VH Region Genes of the Mouse Are Organized in Overlapping Clusters," <i>Eur. J. Immunol.</i> 17:1351-1357 (1987).
	Brinster, et al., "Introns Increase Transcriptional Efficiency in Transgenic Mice," <i>Proc. Natl. Acad. Sci., USA</i> , 85:836-840 (1988).
	Brownstein et al., "Isolation of Single-copy Human Genes from a Library of Yeast Artificial Chromosome Clones," <i>Science</i> 244:1348-1351 (1989).
	Brüggemann et al., "A Repertoire of Monoclonal Antibodies with Human Heavy Chains from Transgenic Mice," <i>Proc. Natl. Acad. Sci.</i> 86:6709-6713 (1989).
	Brüggemann et al., "Construction, Function and Immunogenicity of Recombinant Monoclonal Antibodies," <i>Behring Inst. Mitt.</i> 87:21-24 (1990).
	Brüggemann et al., "Human Antibody Production in Transgenic Mice: Expression from 100 Kb of the Human IgH Locus," <i>Eur. J. Immunol.</i> 21:1323-1326 (1991).
	Burke et al., "Cloning of Large Segments of Exogenous DNA into Yeast by Means of Artificial Chromosome Vectors," <i>Science</i> 236:806-812 (1987).
	Buttin, et al., "Exogenous Ig Gene Rearrangement in Transgenic Mice: A New Strategy for Human Monoclonal Antibody Production," <i>Trends in Genetics</i> 3(8):205-206 (1987).
	Capecchi, et al., "Altering The Genome By Homologous Recombination," <i>Science</i> 244:1288-1292 (1989).
	Choi, et al., "RNA Splicing Generates a Variant Light Chain from an Aberrantly Rearranged $\kappa$ Gene," <i>Nature</i> 286:776-779 (1980).
	Choi, et al., "Transgenic mice containing a human heavy chain immunoglobulin gene fragment cloned in a yeast artificial chromosome," <i>Nature Genetics</i> 4:117-123 (1993).
	Cox Declaration, from United States Patent No. 5,545,806.
✓	Davies et al., "Targeted Alterations in Yeast Artificial Chromosomes for Inter-species Gene Transfer," <i>Nucleic Acids Res.</i> 20:2693-2698 (1992).

EXAMINER

DATE CONSIDERED

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## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER INITIAL	
/AW/	Doelker, et al., "The CySF-L2 factor from dialysable human leucocyte extract activates natural killer cytotoxicity by induction of interferon $\gamma$ ," <i>Cancer Immunology Immunotherapy</i> , 34:299-305 (1992).
	Doetschman et al., "Targeted Mutation of the Hprt Gene in Mouse Embryonic Stem Cells," <i>Proc. Natl. Acad. Sci. USA</i> , 85: 8583-8587 (1988).
	Dorfman, N.A., "The Optimal Technological Approach to the Development of Human Hybridomas," <i>J. Biol. Resp. Modif.</i> 4:213-239 (1985).
	Eisen, Herman N., "Immunology: An Introduction to Molecular and Cellular Principles of the Immune Responses," 349-351 (2d ed. 1989).
	Eliceiri et al., "Stable Integration and Expression in Mouse Cells of Yeast Artificial Chromosomes Harboring Human Genes," <i>Proc. Natl. Acad. Sci.</i> 88:2179-2183 (1991).
	Emery, et al., "Humanised monoclonal antibodies for therapeutic applications," <i>Expert Opinion on Investigational Drugs</i> , 3:241-251 (1994).
	Garza et al., "Mapping the <i>Drosophila</i> Genome with Yeast Artificial Chromosomes," <i>Science</i> 246:641-646 (1989).
	Gnirke et al., "Cloning and in Vivo Expression of the Human GART Gene Using Yeast Artificial Chromosomes," <i>EMBO J.</i> 10(7):1629-1634 (1991).
	Green, et al., "Antigen-Specific Human Monoclonal Antibodies from Mice Engineered with Human Ig Heavy and Light Chain YACs," <i>Nature Genetics</i> 7:13-21 (1994).
	Griffiths, et al., "Isolation of high affinity human antibodies directly from large synthetic repertoires," <i>The EMBO Journal</i> , 13:3245-3260 (1994).
	Huxley et al., "The Human HPRT Gene on a Yeast Artificial Chromosome Is Functional When Transferred to Mouse Cells by Cell Fusion," <i>Genomics</i> 9:742-750 (1991).
	Jakobovits, et al., "Germ-Line Transmission and Expression of a Human-Derived Yeast Artificial Chromosome," <i>Nature</i> 362:255-258 (1993).
	James, et al., "Human monoclonal antibody production: current status and future prospects," <i>Journal of Immunological Methods</i> , 100:5-40 (1987).
	Johnson, et al., "Targeting of Nonexpressed Genes in Embryonic Stem Cells Via Homologous Recombination," 245:1234-1236 (1989).
	Joyner et al., "Production of a Mutation in Mouse En-2 Gene by Homologous Recombination in Embryonic Stem Cells," <i>Nature</i> 338:153-155 (1989).
	Koller et al., "Inactivating the $\beta_2$ -microglobulin Locus in Mouse Embryonic Stem Cells by Homologous Recombination," <i>Proc. Natl. Acad. Sci.</i> 86:8932-8935 (1989).
↓	Kucheralapati, R., "Homologous Recombination in Mammalian Somatic Cells," <i>Prog. Nucleic Acid Res. Mol. Biol.</i> 36:301-310 (1989).

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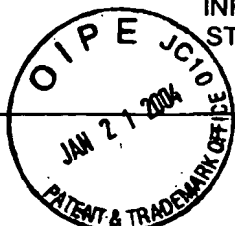
EXAMINER INITIAL	
/AW/	Lenz, et al., "Expression of heterobispecific antibodies by genes transferred into producer hybridoma cells," <i>Gene</i> , 87:213-218 (1990).
	Liu et al., "Chimeric mouse-human IgG1 antibody that can mediate lysis of cancer cells," <i>Proc Natl Acad Sci USA</i> , 84:3439-3443 (1987).
	Mansour, et al., "Disruption of the Proto-Oncogene <i>Int-2</i> In Mouse Embryo-Derived Stem Cells: A General Strategy for Targeting Mutations to Non-Selectable Genes," <i>Nature</i> 336:348-352 (1988).
	Matsuda et al., "Structure and Physical Map of 64 Variable Segments in the 3' 0.8-megabase Region of the Human Immunoglobulin Heavy-chain Locus," <i>Nature Genet.</i> 3:88-94 (1993).
	Max, et al., "Sequences of Five Potential Recombination Sites Encoded Close to an Immunoglobulin $\kappa$ Constant Region Gene," <i>Proc. Natl. Acad. Sci., USA</i> 76(7):3450-3454 (1979).
	Miller, et al., "Structural Alterations in J Regions of Mouse Immunoglobulin $\lambda$ Genes are Associated with Differential Gene Expression," <i>Nature</i> 295:428-430 (1982).
	Morrison, "Success in Specification," <i>Nature</i> , 368:812-813 (1994).
	Mortensen et al., "Production of Homozygous Mutant ES Cells with a Single Targeting Construct," <i>Mol. Cell. Biol.</i> 12(5):2391-2395 (1992).
	Munker, et al., "Recombinant human TNF induces production of granulocyte-monocyte colony-stimulating factor," <i>Nature</i> , 323:79-82 (1986).
	Orkin, et al., "Mutation in an Intervening Sequence Splice Junction in Man," <i>Proc. Natl. Acad. Sci. USA</i> 78(8):5041-5045 (1981).
	Pachnis et al., "Transfer of a Yeast Artificial Chromosome Carrying Human DNA from <i>Saccharomyces cerevisiae</i> into Mammalian Cells," <i>Proc. Natl. Acad. Sci.</i> 87:5109-5113 (1990).
	Pavan et al., "Modification and Transfer into an Embryonal Carcinoma Cell Line of a 360-kilobase Human-derived Yeast Artificial Chromosome," <i>Mol. Cell. Biol.</i> 10(8):4163-4169 (1990).
	Queen, et al., "A humanized antibody that binds to the interleukin 2 receptor," <i>Proc. Natl. Acad. Sci. USA</i> , 86:10029-10033 (1989).
	Rajewsky, et al., "Evolutionary and Somatic Selection of the Antibody Repertoire in the Mouse," <i>Science</i> 238:1088-1094 (1987).
	Ramirez-Solis, et al., "Chromosome Engineering in Mice," <i>Nature</i> 378:720-724 (1995).
	Sakano, et al., "Sequences at the Somatic Recombination Sites of Immunoglobulin Light-Chain Genes," <i>Nature</i> 280:288-294 (1979).
	Sakano, et al., "Two Types of Somatic Recombination are Necessary for the Generation of Complete Immunoglobulin Heavy-Chain Genes," <i>Nature</i> 286:676-683 (1980).
	Sakano, et al., "Identification and nucleotide sequence of a diversity DNA segment (D) of immunoglobulin heavy-chain genes," <i>Nature</i> , 290:562-565 (1981).

EXAMINER

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## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER INITIAL	
/AW/	Schedl, et al., "Transgenic Mice Generated By Pronuclear Injection of a Yeast Artificial Chromosome," <i>Nucl. Acids Res.</i> 20:3073-3077 (1992).
	Schedl, et al., "A Method for the Generation of YAC Transgenic Mice by Pronuclear Microinjection," <i>Nucleic Acids Research</i> 21(20):4783-4787 (1993).
	Schedl, et al., "A yeast artificial chromosome covering the tyrosinase gene confers copy number-dependent expression in transgenic mice," <i>Nature</i> , 362:258-261 (1993).
	Schwartzberg et al., "Germ-Line Transmission of a c-abl Mutation Produced by Targeted Gene Disruption in ES Cells," <i>Science</i> 246:799-803 (1989).
	Seidman, et al., "A Mutant Immunoglobulin light Chain is Formed by Aberrant DNA- and RNA-Splicing Events," <i>Nature</i> 286:779-783 (1980).
	Shimizu, et al., "Immunoglobulin Double-Isotype Expression by Trans-mRNA in a Human Immunoglobulin Transgenic Mouse," <i>Proc. Natl. Acad. Sci., USA</i> 86:8020-8023 (1989).
	Shin et al., "Physical Map of the 3' Region of the Human Immunoglobulin Heavy Chain Locus: Clustering of Autoantibody-related Variable Segments in One Haplotype," <i>EMBO J.</i> 10:3641-3645 (1991).
	Strauss, W. M. et al., "Germ Line Transmission of a Yeast Artificial Chromosome Spanning the Murine $\alpha_1(I)$ Collagen Locus," <i>Science</i> 259:1904-1907 (1993).
	Thomas, et al., "Site-directed mutagenesis by gene targeting in mouse embryo-derived stem cells," <i>Cell</i> , 51:503-512 (1987).
	Traver, et al., "Rapid screening of a human genomic library in yeast artificial chromosomes for single-copy sequences," <i>Proc. Natl. Acad. Sci.</i> , 86:5898-5902 (1989).
	Treisman, et al., "Specific Transcription and RNA Splicing Defects in Five Cloned $\beta$ -thalassaemia Genes," <i>Nature</i> 302:591-596 (1983).
	Tucker et al., "Mouse IgA Heavy Chain Gene Sequence: Implications for Evolution of Immunoglobulin Hinge Exons," <i>Proc. Natl. Acad. Sci.</i> 78:7684-7688 (1981).
	Yancoupoulos, et al. "Developmentally Controlled and Tissue-Specific Expression of Unrearranged $V_H$ Gene Segments," <i>Cell</i> 40:271-281 (1985).
	Zachau., "The Human Immunoglobulin $\kappa$ Locus and Some of its Acrobatics," <i>Biol. Chem.</i> 371:1-6 (1990).
✓	Zijlstra, et al., "Germ-Line Transmission of a Disrupted $\beta_2$ -microglobulin Gene Produced by Homologous Recombination in Embryonic Stem Cells," <i>Nature</i> 342:435-438 (1989).

EXAMINER /Anne Marie Wehbe/ (03/18/2007)

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